

FIG. 1

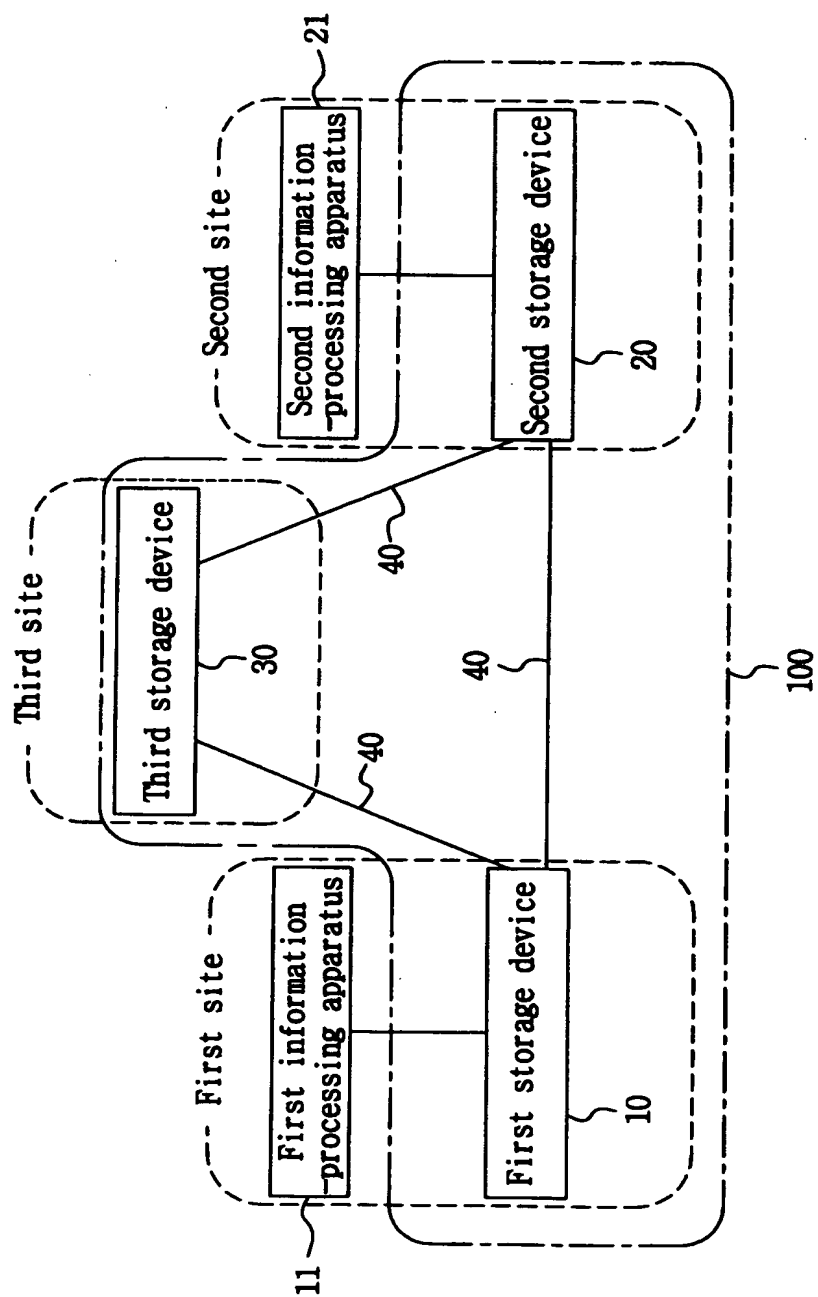


FIG. 2

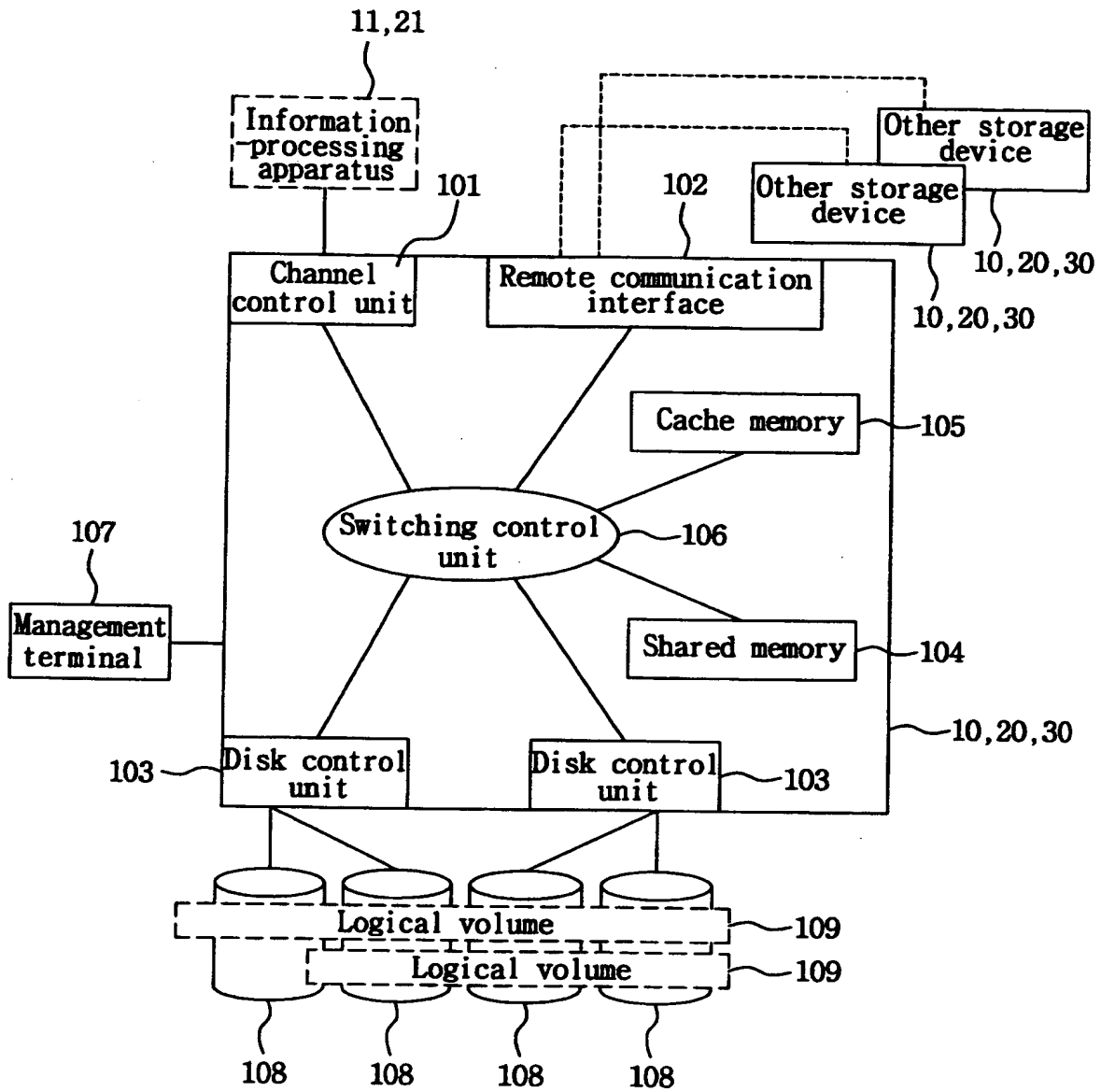


FIG. 3

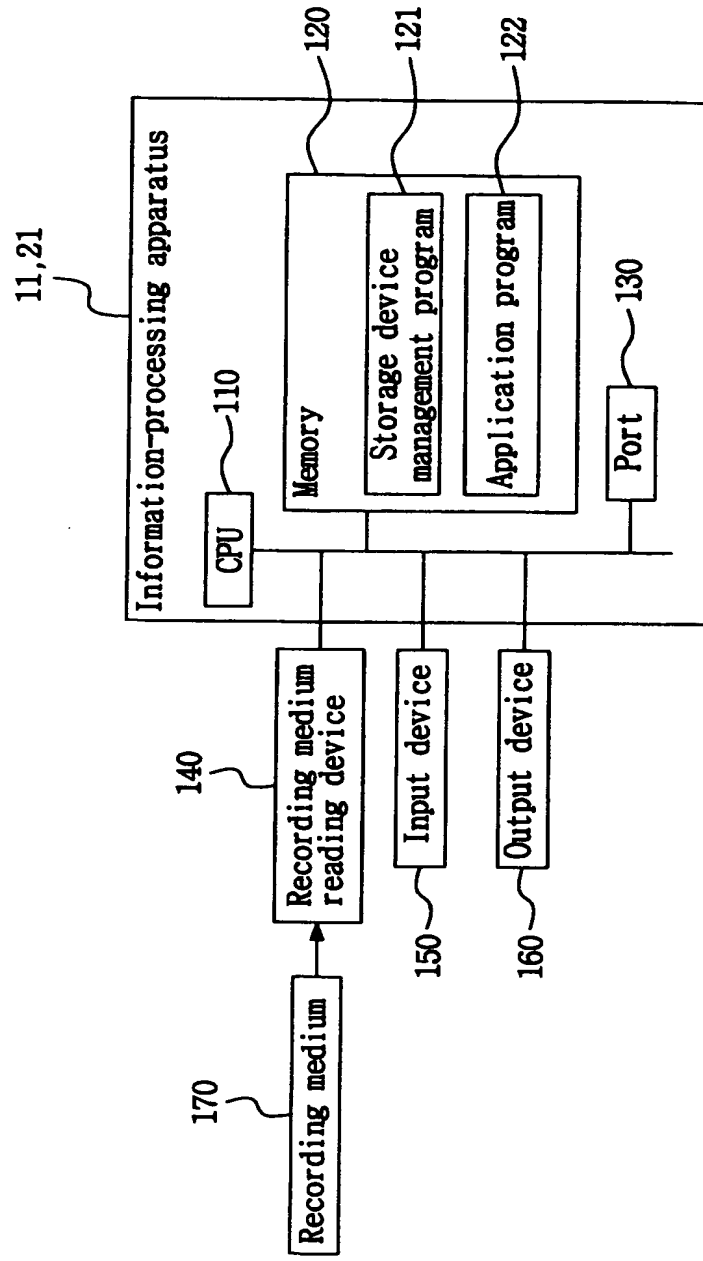


FIG. 4

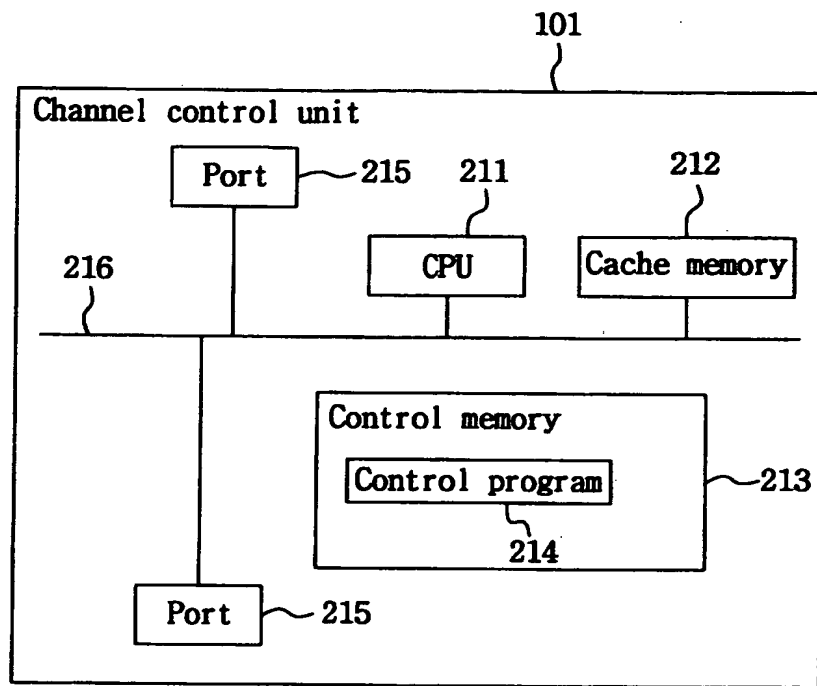


FIG. 5

Shared memory

Consistency group management table

Consistency group number	Split start time	Differential delete time
0	12:00	-
1	-	-
2	-	-
3	-	-
:	:	:

Pair management table

Type of pair	Copy manner	Copy source device	Copy destination device	Copy source volume	Copy destination volume	Pairing status	Consistency group
Local	-	-	-	0	2	Under pair	0
Local	-	-	-	1	3	Under pair	0
Remote	Asynchronous	First	Second	0	0	Under split	0
:	:	:	:	:	:	:	:

Differential management table

Volume 0	Volume 1	Volume 2	Volume 3	Volume 4
011000110011	100111000101	111111010100	010010101010	000000000010
100011010010	010001010001	101011110101	101010011111	111110100001
000001010101	001011001010	001011110110	000101010110	010111101001
1001...	0011...	1000...	0010...	0010...
:	:	:	:	:

FIG. 6

Pair management table of each storage device

First storage device

Type of pair	Copy manner	Copy source device	Copy destination device	Copy source volume	Copy destination volume	Pairing status	Consistency group
Local	-	-	-	0	2	Under pair	0
Local	-	-	-	1	3	Under pair	0
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
Remote	Asynchronous	First	Second	0	0	Under split	1
Remote	Asynchronous	First	Second	1	1	Under split	1
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
Remote	Synchronous	First	Third	0	0	Under pair	0
Remote	Synchronous	First	Third	1	1	Under pair	0
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

Second storage device

Type of pair	Copy manner	Copy source device	Copy destination device	Copy source volume	Copy destination volume	Pairing status	Consistency group
Remote	Asynchronous	First	Second	0	0	Under split	1
Remote	Asynchronous	First	Second	1	1	Under split	1
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

Third storage device

Type of pair	Copy manner	Copy source device	Copy destination device	Copy source volume	Copy destination volume	Pairing status	Consistency group
Remote	Synchronous	First	Third	0	0	Under pair	0
Remote	Synchronous	First	Third	1	1	Under pair	0
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 7

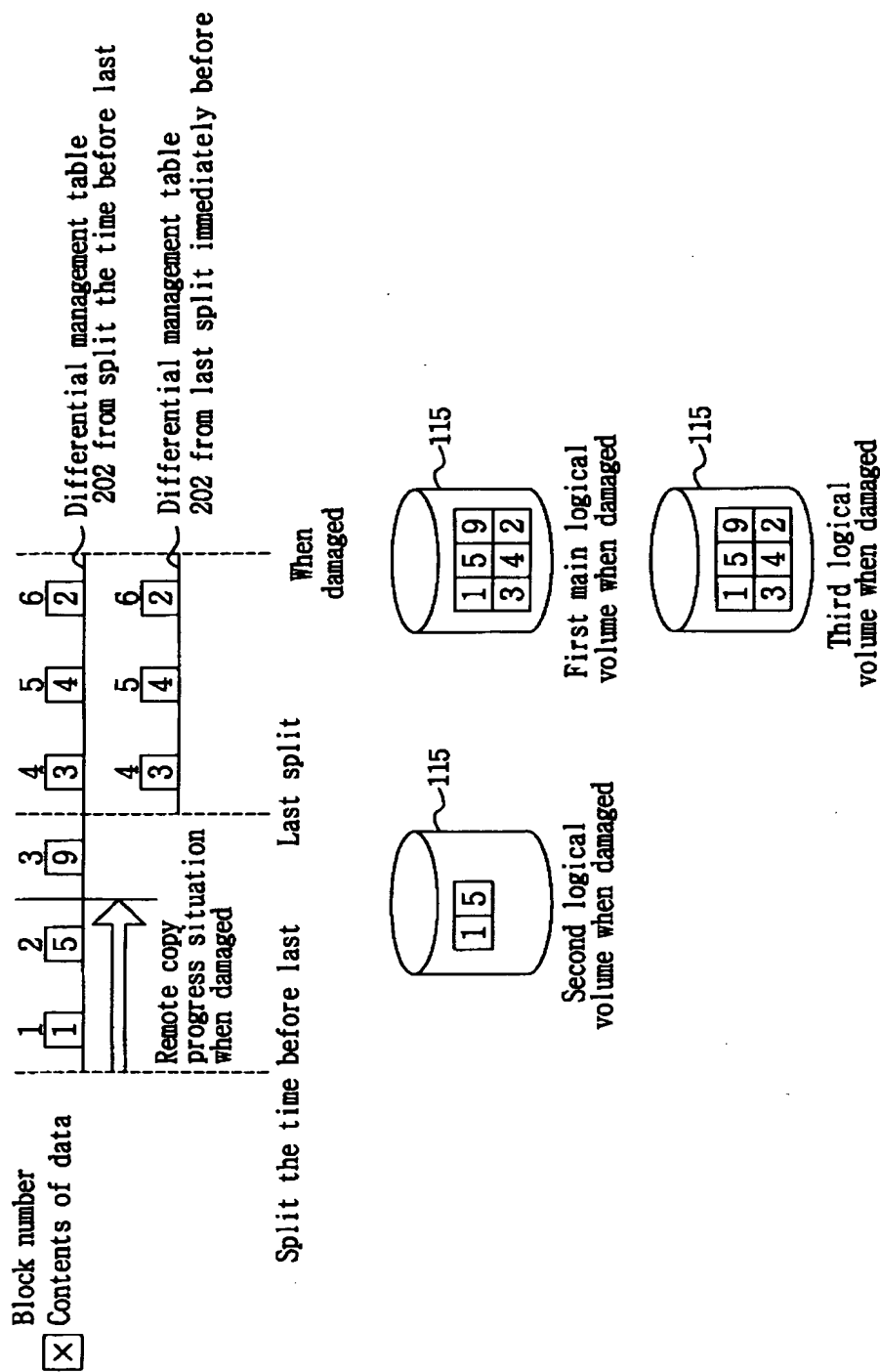


FIG. 8

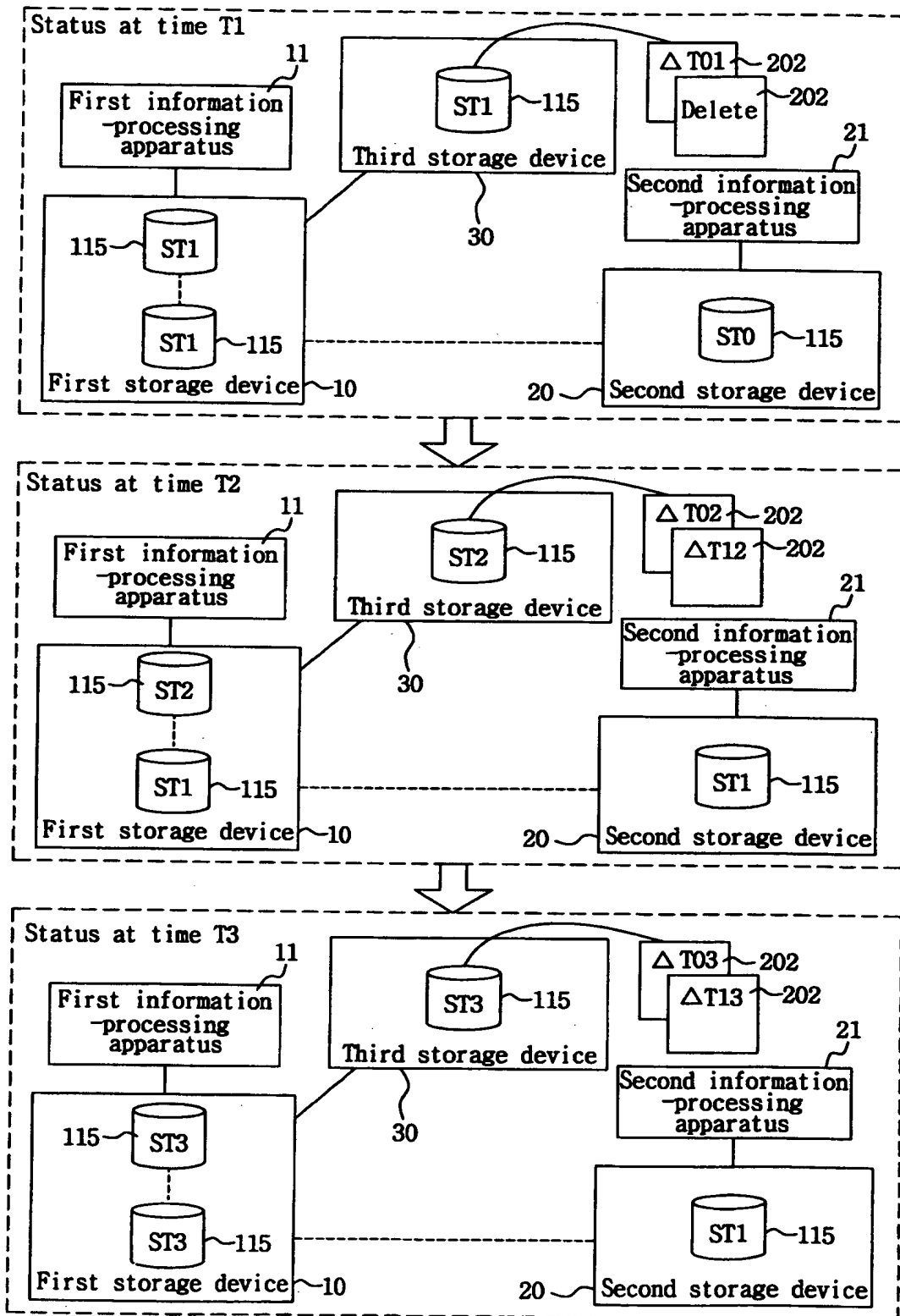


FIG. 9

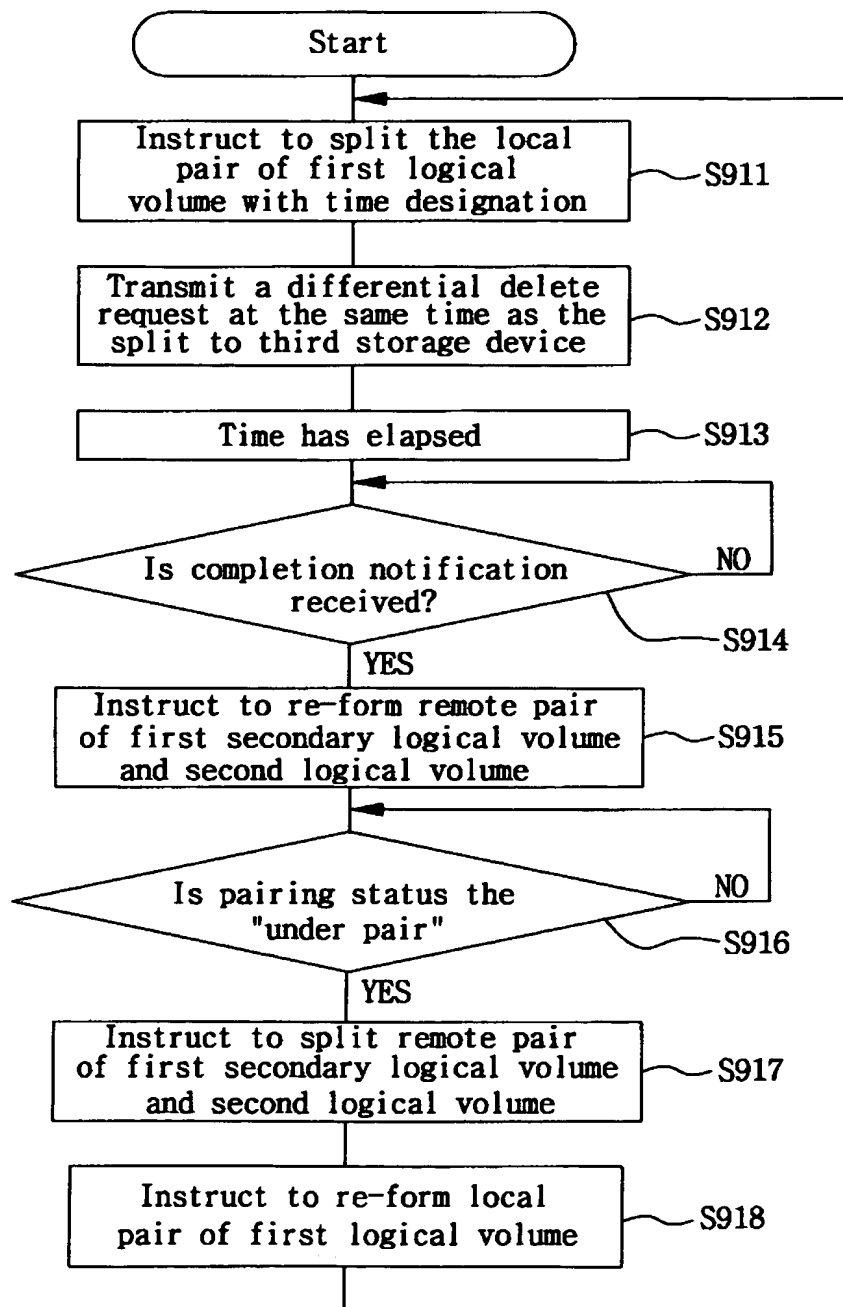


FIG. 10A

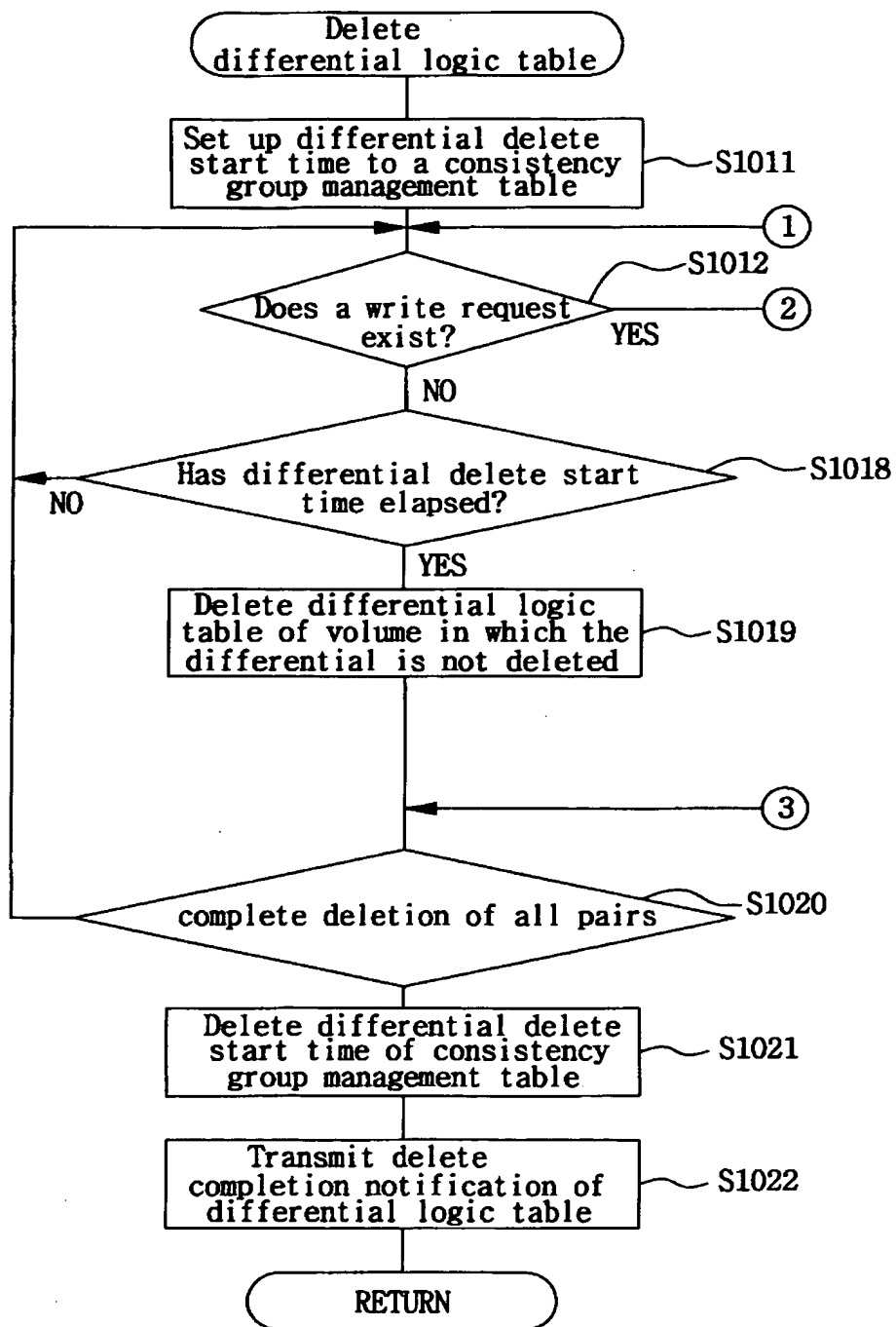


FIG. 10B

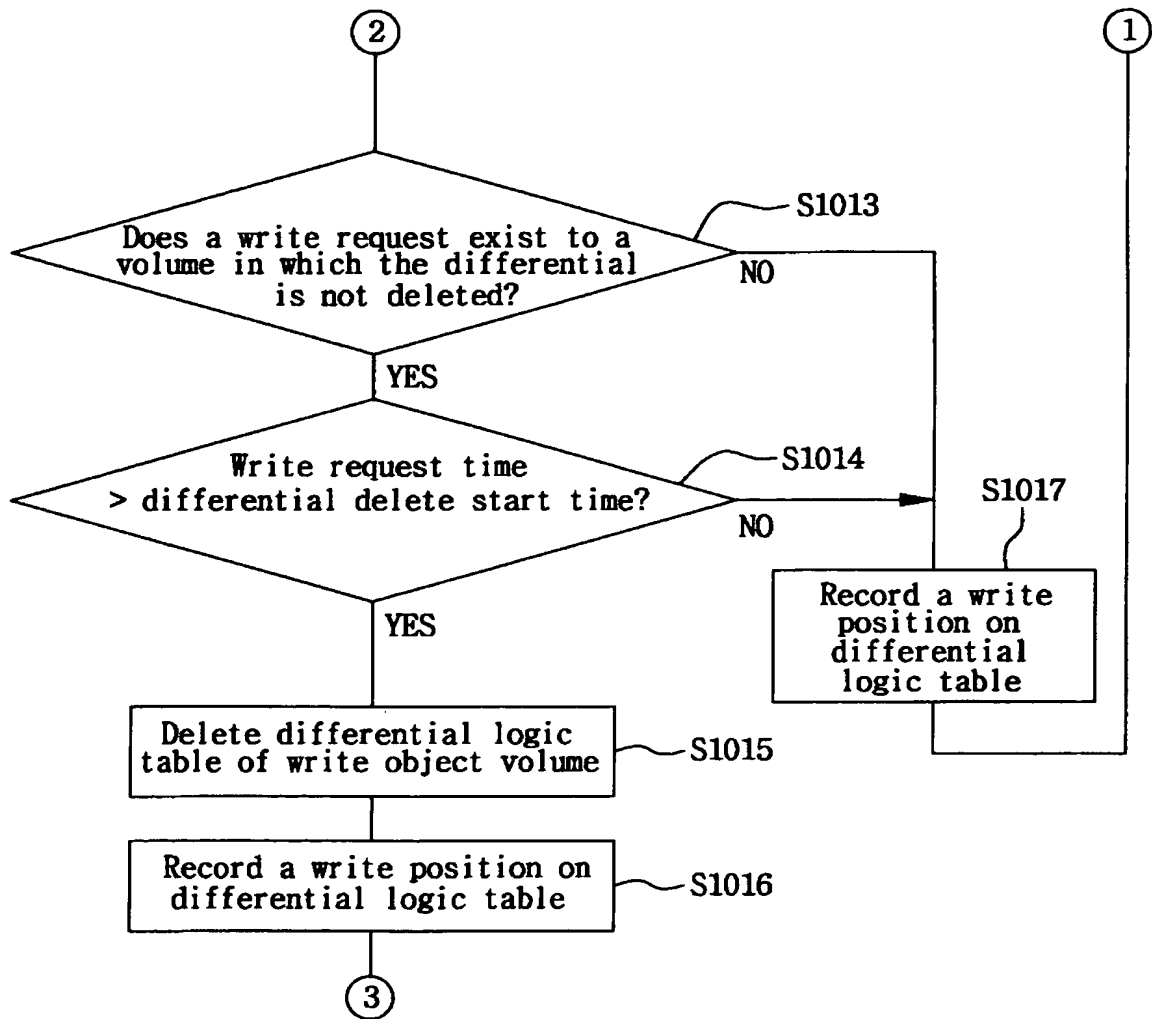


FIG. 11A

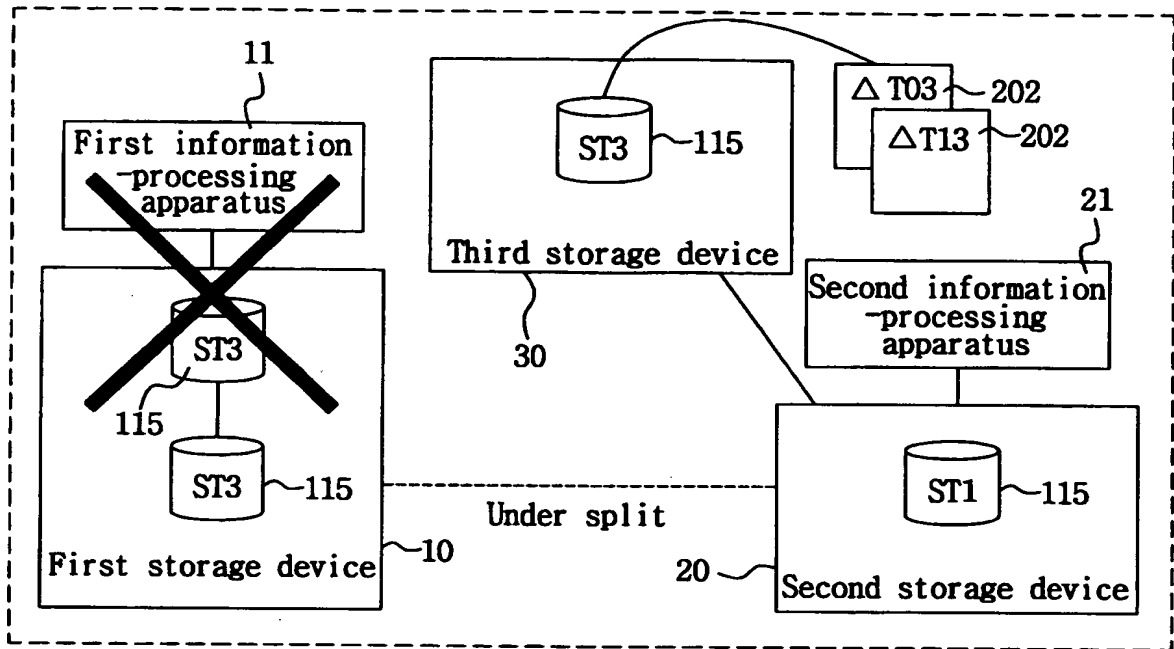


FIG. 11B

